

Claims

- [001] 1. Method for managing a computer system, the system operating with a plurality of blades (112), the method comprising: detecting the presence of a new blade in the computer system; installing an operating system on the new blade; configuring the operation system; and copying a service that is running on an earlier detected blade to the new blade.
- [002] 2. The method of claim 1, wherein installing the operating system is performed by accessing a mass storage that is part of the system.
- [003] 3. The method of claim 1, wherein installing is performed by using scripts.
- [004] 4. The method of claim 3, wherein installing is performed by using scripts that are part of the service that is running on the system prior to detecting the new blade.
- [005] 5. The method of claim 1, wherein between detecting and installing step the following is performed: monitoring systems performance and continuing with installing upon reaching a predefined threshold of a measurement value.
- [006] 6. The method of claim 5, wherein the measurement values are taken from at least one of the following: usage of processor (202) resources, processing times, usage of memory (204), remaining capacity of data storage (206), communication parameters of blade interface (208).
- [007] 7. The method of claim 5, wherein monitoring is performed periodically.
- [008] 8. The method of claim 5, wherein monitoring is performed by monitoring processes that operate consecutively for adjacent blades.
- [009] 9. The method of claim 8, wherein monitoring is performed by a token ring technique.
- [010] 10. The method of claim 5, wherein the measurement values are related to the blades independently.
- [011] 11. The method of claim 6, wherein the processing times are related to processing times for incoming telephone calls, a call rate, in case the computer system operates an application with telephone call centre activity.
- [012] 12. The method of claim 1, wherein computer instructions to perform the steps detecting are part of services that are running on the computer system.
- [013] 13. The method of claim 1, wherein computer instructions to perform the steps detecting to copying are performed according to criteria in the service that is running on the earlier detected blade.
- [014] 14. The method of claim 1, wherein copying the service comprises to copy data that is access from the main memory of the earlier detected blade to main memory of the new blade.

- [015] 15. The method of claim 1, wherein copying the service comprises to restart the service, wherein executable instructions of the service are loaded from a central storage and wherein an image of the process context of the service is transferred to the new blade.
- [016] 16. The method of claim 1, wherein copying the service comprises to modify the version of the service.
- [017] 17. The method of claim 1, wherein installing the operating system comprises to modify the system.
- [018] 18. The method of claim 1, characterized in performing the method for at least 3 blades, for subsequent execution of a controller service, an engine service, and a monitor service, the services belonging to the same business application.
- [019] 19. Method of claim 1, controlled by a controller residing on at least one blade, wherein the controller performs further functions selected from the group of: testing the copy of the service on the new blade and modifying the execution of the service on the earlier detected blade in case the copy of the service operates successfully.
- [020] 20. The method of claim 19, wherein modifying comprises to stop the service on the earlier detected blade.
- [021] 21. Method for managing a computer system, the system operating with a plurality of computers, the method comprising: assigning a service (e.g., service A) to set of computers (1, 2) to a group; shifting a service (e.g., service A) that runs on a first computer (e.g., computer 1) of the group to run on a second computer (e.g., computer 2) in the group; re-installing the operating system to the first computer.
- [022] 22. The method of claim 21, wherein shifting and re-installing is repeated cyclically for all computers in the groups, thereby keeping the number of computers with the attribute re-installing the operating system smaller than the number of computers with the attribute re-installed operating systems.
- [023] 23. The method of claim 21, wherein shifting is accompanied by testing the service in parallel operation on the first computer and on the second computer and disabling the operation of the service by the first computer only if the test is successful.
- [024] 24. The method of claim 21, wherein step assigning is performed for services of a first class (e.g., controller services) to a first group of computers and for services of a second class (e.g., monitor services) to a second group of computers.
- [025] 25. The method of claim 21, applied for computers that are blades.
- [026] 26. Computer program (100) comprising program instructions for causing a

computer to perform the method of any of claims 1-23.

- [027] 27. Computer program (100) according to claim 26, embodied on a record medium (970).